

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/005928

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C23C14/24, 14/12, 16/448, H05B33/10, 33/14, 33/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C23C14/24, 14/12, 16/448, H05B33/10, 33/14, 33/28

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

| | | | |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho | 1922-1996 | Jitsuyo Shinan Toroku Koho | 1996-2005 |
| Kokai Jitsuyo Shinan Koho | 1971-2005 | Toroku Jitsuyo Shinan Koho | 1994-2005 |

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|------------------------------|
| X | JP 2004-79904 A (Sony Corp.), 11 March, 2004 (11.03.04), Par. Nos. [0003] to [0005] (Family: none) | 33, 42, 43, 49-53 |
| Y | JP 2000-160328 A (Idemitsu Kosan Co., Ltd.), 13 June, 2000 (13.06.00), Par. Nos. [0001], [0080] (Family: none) | 1-15, 17-24, 34-41, 45-48 |
| Y | JP 2003-301255 A (Kabushiki Kaisha Eiko Engineering), 24 October, 2003 (24.10.03), Par. No. [0037] (Family: none) | 1-15, 17-20, 22-24 |
| Y | JP 2003-301255 A (Kabushiki Kaisha Eiko Engineering), 24 October, 2003 (24.10.03), Par. No. [0037] (Family: none) | 3-10, 34-41 |

 Further documents are listed in the continuation of Box C. See patent family annex.

| | |
|---|--|
| * Special categories of cited documents: | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier application or patent but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search
19 May, 2005 (19.05.05)Date of mailing of the international search report
21 June, 2005 (21.06.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/005928

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|------------------------|
| Y | JP 9-279346 A (Central Glass Co., Ltd.), 28 October, 1997 (28.10.97), Par. No. [0032] to [0034] (Family: none) | 5, 36, 17-19, 46-48 |
| Y | JP 2003-313654 A (Semiconductor Energy Laboratory Co., Ltd.), 06 November, 2003 (06.11.03), Par. No. [0074] & EP 1319732 A1 & US 6776847 B2 | 9, 15, 40 |
| Y | JP 2002-194548 A (Toshiba Corp.), 10 July, 2002 (10.07.02), Par. Nos. [0016] to [0020] (Family: none) | 20, 25-32 |
| Y | JP 2004-22674 A (Tokyo Electron Ltd.), 22 January, 2004 (22.01.04), Par. No. [0016] (Family: none) | 21 |
| Y | JP 10-158820 A (ULVAC Japan Ltd.), 16 June, 1998 (16.06.98), Par. Nos. [0038] to [0039] (Family: none) | 22, 45 |
| Y | JP 2003-68713 A (Matsushita Electric Industrial Co., Ltd.), 07 March, 2003 (07.03.03), Par. Nos. [0002] to [0007] (Family: none) | 25-32 |
| Y | JP 7-231936 A (Daiichi Pharmaceutical Co., Ltd.), 05 September, 1995 (05.09.95), Par. No. [0012] (Family: none) | 27, 31 |
| Y | JP 2000-104172 A (Toshiba Corp.), 11 April, 2000 (11.04.00), Par. No. [0048] & US 2001/0003603 A1 | 29-32 |
| P, X | JP 2005-58978 A (Tadahiro OMI), 10 March, 2005 (10.03.05), Claims & WO 2005/025735 A1 | 25-32 |
| A | JP 2004-10989 A (Sony Corp.), 15 January, 2004 (15.01.04), Full text (Family: none) | 1-53 |